1	2	3	4	5
19.	Orissa	99	115	5
20.	Pondicherry	10	5	10
21.	Punjab	350	500	525
22.	Rajasthan	181	105	155
23.	Tamil Nadu	325	655	952
24.	Tripura	50	5	25
25.	Uttar Pradesh	1983	1118	0
26.	Uttaranchal	5	309	265
27.	West Bangal	2867	2510	2818
	TOTAL:	13903	10812	11277

Potential of energy generation from wind and solar power

†228. SHRI LALIT KISHORE CHATURVEDI: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the potential of generation of energy from wind power and solar power in Rajathan, source-wise;

(b) the amount of energy generated by each source alongwith the names of districts involved;

(c) the scheme for exploitation of the remaining capacity; and

(d) whether Government would consider the proposal regarding tripartite arrangement involving Central Government, the Rajasthan Government and the private investors to exploit energy?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR): (a) and (b) A gross wind power potential of 5400 MWe has been estimated in Rajasthan based on areas having wind power density of 200 Watts per square metre or more at 50 metre hub height and assuming land availability in potential arears @ one percent and land requirement @ 12 hectare per MW. Solar radiation has been estimated at 6 kwh per square metre for most parts of the Rajasthan. The cumulative wind power installed capacity in the districts of Chittorgarh, Sikar and Jaisalmer is 470 MW upto 30.06.2007. However, in view of the high initial cost of generation of solar power currently estimated at Rs. 20/kwh, the same has not been exploited for grid quality power generation purpose. Accordingly, three technology demonstration grid interactive SPV power projects aggregating 150 KWp have only been set up in the districts of Jaipur and Jhunjhunu upto 30.06.2007.

(c) The Union Government of India promotes setting up of wind power projects in the country, including Rajasthan, through fiscal incentives such as concessional customs duty on certain components excise duty exemption, ten years tax holiday on income generated from wind power projects and accelerated depreciation. This apart, preferential tariff is being provided for wind power in most of the potential States, including Rajasthan.

†Original notice of the question was received in Hindi.

(d) Wind power harnessing is in the private sector, with both Central and State Government playing the role of facilitators. Accordingly, the need for such tripartite agreement has not arisen.

Energy generation by bio-gas plants

229. KUMARI NIRMALA DESHPANDE: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the energy generated by bio-gas plants and utilization thereof, field-wise;

(b) the States that have achieved some result in this field; and

(c) the incentives given for this work?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR): (a) and (b) Cattle dung based family size biogas plants for meeting cooking energy requirement have been installed in almost all the States and Union Territories of the country. Large and medium size biogas plants based on urban and industrial wastes including cattle dung have been installed in the States of Andrha Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal.

Application-wise details of biogas installations and estimated energy generation are given in Statement-I (*See* below).

(c) Programme-wise financial incentives being provided by the Ministry for installation of biogas plants and energy generation systems are given in Statement-II (*See* below).

Statement-I

Application-wise details of biogas installations and estimated energy generation

Sl. No.	Types of Biogas Plants	Estimated Energy Genration Capacity			
		No. of Plants	Biogas (m3)	Electrical Energy (KW)	Thermal Energy in lakh Mega Joule (MJ)
1.	Family size Biogas Plants for cooking applications	39,34,136	78,68,272	-	-
2.	Large size Biogas Plants based on urban wastes for power generation	5	69,100	6,950	
3.	Large size Biogas Plants based on industrial wastes for power and thermal energy generation	16	1,58,860	4,980	16,680
4.	Medium size Biogas Plants based electricity generation	2	536	80	
	TOTAL:	39,34,159	81,28,496	12,010	16,680